Index to Volume 38

Authors and Titles

Abbott, L. K. *See* Scheltema, M. A. 707
Al-Ali, S. J. *See* Walker, D. M. 1061
Allen, D. G. *See* Yeates, J. S. 1033
Allen, R. N.—
Further studies on epidemiological factors influencing control of banana bunchy top disease, and evaluation of control measures by computer simulation 373
Anderson, G. W. *See* Arnold, G. W. 339
Annison, E. F. *See* Rogel, A. M. 629, 639
Archer, M. J., and O'Bruen, L.—
A comparative study of the quality status of Condor wheat grown in northern Victorian and southern New South Wales 465
Arnold, G. W., and Anderson, G. W.—
The influence of nitrogen level, rainfall, seed pools, and pasture biomass on the botanical composition of annual pastures 339
Ash, A. J., and Norton, B. W.—
Studies with the Australian cashmere goat
I. Growth and digestion in male and female goats given pelleted diets varying in protein content and energy level 957
II. Effects of dietary protein concentration and feeding level on body composition of male and female goats 971
Aston, A. R.—
Apex and root temperature and early growth of wheat 231
Aylward, J. H., Court, R. D., Haydock, K. P., Strickland, R. W., and Hegarty, M. P.—
Indigofera species with agronomic potential in the tropics. Rat toxicity studies 177

Bambach, R. W. *See* Kable, P. F. 565, 575
Balnave, D. *See* Rogel, A. M. 629, 639
Barbetti, M. J., and Sivasithamparam, K.—
Effects of soil pasteurization on root rot, seedling survival and plant dry weight of subterranean clover inoculated with six fungal root pathogens 317
Barlow, Roger *See* Darnell, Ross E. 941
Barnes, A. *See* Vinijsanun, T. 717
Beaman, N. J. *See* Fordyce, G. 427
Belboudian, M. H. *See* Walker, R. R. 383
Bergersen, F. J. *See* Turner, G. L. 15
Bidinger, F. R., Mahakshmi, V., and Rao, G. D. P.—
Assessment of drought resistance in pearl millet (*Penniseum americanum* (L.) Leeke).
I. Factors affecting yield under stress 37
II. Estimation of genotype response to stress 49
Blacklow, W. M. *See* Bowran, D. G. 253
Blackwell, J. *See* Jayawardane, N. S. 239
Blair, H. T. *See* McCutcheon, S. N. 917
Blaney, B. J., Moore, C. J., and Tyler, A. L.—
The mycotoxins—4-deoxynivalenol, zearalenone and aflatoxin— in weather-damaged wheat harvested 1983–85 in southern Queensland 993
See also Mannion, P. F. 621
Bowran, D. G., and Blacklow, W. M.—
Sensitivities of spring wheat cultivars to chlorsulfuron measured as inhibitions of leaf elongation rates and there were genotype x environment interactions 253
Brockwell, J., Roughley, R. G., and Herridge, D. F.—
Population dynamics of *Rhizobium japonicum* strains used to inoculate three successive crops of soybean 61
See also Herridge, D. F. 75
Brown, R. F.—
Defoliation regrowth and dry matter partitioning in the two arid zone grasses, *Aristida armata* and *Thyridolepis mitchelliana* 881
Bryden, W. L. *See* Rogel, A. M. 629, 639

Callaghan, Ann *See* Stockdale, C. R. 927
Callinan, A. P. L. *See* Thompson, R. L. 437
Cameron, D. F. *See* Vinijsanun, T. 717; Davis, R. D. 1019
Chalk, P. M. *See* Humphreys, E. 113, 129
Chan, K. Y., Mead, J. A., and Roberts, W. P.—
Poor early growth under direct drilling 791
Chase, D. L. *See* Turner, G. L. 15
Collins, W. J. *See* Tan, B. H. 547
Cornish, P. S.—
Effects of direct drilling on the phosphorus uptake and fertilizer requirements of wheat 775
Court, R. D. *See* Aylward, J. H. 177
Coventry, D. R., Hirth, J. R., and Fung, K. K. H.—
Nutritional restraints on subterranean clover grown on acid soils used for crop–pasture rotation 163
Cullis, Brian R. *See* Martin, R. J. 487

Darnell, Ross E., Hearnshaw, Helen, and Barlow, Roger.—
Growth and carcass characteristics of crossbred and straightbred Hereford steers. III. Post-weaning growth in seven environments in New South Wales 941
Davies, H. Lloyd *See* Soeparno 403, 417
Davis, R. D., Irwin, J. A. G., Cameron, D. F., and Shepherd, R. K.—
Epidemiological studies on anthracnose diseases of *Stylosanthes* species caused by *Colletotrichum gloeosporiodes* in north Queensland and pathogenic specialization within natural fungal populations 1019
Dear, B. S., and Lipsett, J.—
The effect of boron supply on the growth and seed production of subterranean clover (*Trifolium subterraneum* L.) 537
De Marco, D. G. *See* McLachlan, K. D. 1
Dodd, J., and Panetta, F. D.—
Seed production by skeleton weed (*Chondilla juncea* L.) in Western Australia in relation to summer drought 689
Dodman, R. L., and Wildermuth, G. B.—
Inoculation methods for assessing resistance in wheat to crown rot caused by *Fusarium graminearum* Group I 473
Douglas, L. A. *See* Humphreys, E. 113

Elliott, D. E. *See* McLachlan, K. D. 1
Ellison, P. J. McFadyen, L., and Kable, P. F.—
Overwintering of *Tranzchelia discolor* in prune orchards in New South Wales 895
See also Kable, P. F. 565

Fordyce, G., Holyrood, R. G., Beaman, N. J., James, T. A., Hoffmann, D., and Shepherd, R. K.—
The prevalence of epitheliogenesis imperfecta in Sahiwal cattle and their crosses in a North Queensland beef herd 427
Fung, K. K. H. *See* Coventry, D. R. 163

Galbraith, J. C.—
The pathogenicity of an Australian isolate of *Acremonium zonatum* to water hyacinth, and its relationship with the biological control agent, *Neochetina eichhorniae* 219
Garran, J. H. *See* McLachlan, K. D. 1
Gault, R. R. *See* Turner, G. L. 15
Gillespie, D. *See* McGrath, D. J. 720
Glatz, P. C., Polkinghorne, R. W., and Howard, B.—
Physiological relationships with production measures in white leghorns subjected to restricted feeding from 18 weeks of age 445
Goodchild, D. J., and Myers, L. F.—
Rhizosheaths—a neglected phenomenon in Australian agriculture 559
Graham, Robin D. *See* Marcar, N. E. 501
Gramshaw, D., Pengelly, B. C., Muller, F. W., the late Harding, W. A. T., and Williams, R. J.—
Classification of a collection of the legume *Alysicarpus* using morphological and preliminary agronomic attributes 355
Guy, P. L., Johnstone, G. R., and Morris, D. I.—
Barley yellow dwarf viruses in, and aphids on, grasses (including cereals) in Tasmania 139

Hacker, J. B.—
Genetic shift in *Setaria sphacelata* in response to grazing 907
See also Wilson, J. R. 287
Hallam, N. D. *See* Heath, Robyn 395; Wimalajeewa, D. L. S. 735
Hamblin, Ann and Tennant, D.—
Root length density and water uptake in cereals and grain legumes: how well are they correlated? 513
Hamilton, J. A., and Webster, M. E. D.—
Food intake, water intake, urine output, growth rate and wool growth of lambs accustomed to high or low intake of sodium chloride 187
Harding, the late W. A. T. *See* Gramshaw, D. 355
Haydock, K. P. *See* Aylward, J. H. 177
Hayward, A. C. *See* Wimalajeewa, D. L. S. 735
Hearnshaw, Helen *See* Darnell, Ross E. 941
Heath, Robyn, Sward, R. J., Moran, Jane R., Mason, Angela J., and Hallam, N. D.—
Biological characterization of six Australian isolates of potato virus Y and their serological detection by ELISA 395
Hegarty, M. P. *See* Aylward, J. H. 177
Hennessy, D. W. *See* Lee, G. J. 195
Herridge, D. F., Roughley, R. J., and Brockwell, J.—
Low survival of *Rhizobium japonicum* inoculant leads to reduced nodulation, nitrogen fixation and yield of soybean in the current crop but not in the subsequent crop 75
See also Brockwell, J. 61
Hirth, J. R. *See* Coventry, D. R. 163
Hochman, Z.—
Quantifying vernalization and temperature promotion effects on time of flowering of three cultivars of *Medicago trunculata* Gaertn. 279
Hodgson, A. S., and Macleod, D. A.—
Effects of foliar applied nitrogen fertilizer on cotton waterlogged in a cracking grey clay 681

Hoey, W. A. *See* McDonald, B. J. 597, 765
Hoffmann, D. *See* Fordyce, G. 427
Holyrood, R. G. *See* Fordyce, G. 427
Hopkins, P. S. *See* McDonald, B. J. 597
Howard, B. *See* Glatz, P. C. 445
Humphreys, E. Muirhead, W. A., Melhuish, F. M., and White, R. J. G.— Effects of time of urea application on combine-sown Calrose rice in South-east Australia. I 101
Humphreys, E., Muirhead, W. A., Melhuish, F. M., White, R. J. G., Chalk, P. M., and Douglas, L. A.— Effects of time of urea application on combine-sown Calrose rice in South-east Australia. II. Mineral nitrogen transformations in the soil-water system 113
Humphreys, E., Chalk, P. M., Muirhead, W. A., Melhuish, F. M., and White, R. J. G.— Effects of time of urea application on combine-sown Calrose rice in South-east Australia. III. Fertiliser nitrogen recovery, efficiency of fertilisation and soil nitrogen supply 129
Humphreys, L. R. *See* Kowithayakorn, L. 529; Stür, W. W. 869
Hunter, R. A., and Siebert, B. D.— The effect of supplements of rumen-degradable protein and formaldehyde treated casein on the intake of low-nitrogen roughages by *Bos taurus* and *Bos indicus* steers at different stages of maturity 209

Irwin, J. A. G. *See* Vinijsanun, T. 717; Davis, R. D. 1019

Jacobs, B. C. *See* Pearson, C. J. 1001
James, T. A. *See* Fordyce, G. 427
Jayawardane, N. S., Blackwell, J., and Stapper, M.— Effect of changes in moisture profiles of a transitional red-brown earth with surface and slotted gypsum applications on the development and yield of a wheat crop 239
Johnson, K. G.— Shading behaviour of sheep: preliminary studies of its relation to thermoregulation, feed and water intakes, and metabolic rates 587
Johnson, T. *See* Kelly, R. W. 757
Johnstone, G. R. *See* Guy, P. L. 139

Kable, P. F., Bambach, R. W., Ellison, P. J., Watson, A., and Kaldor, C. J.— Fungicidal control of rust of French prune caused by *Tranzchelia discolor* 565
Kable, P. F., Keen, B. J., and Bambach, R. W.— Evaluation of fungicides for curative activity against *Tranzchelia discolor*, cause of the rust disease of French prune (*Prunus domestica* L.) 575
See also Ellison, P. L. 895
Kaldor, C. J. *See* Kable, P. F. 565
Karunajeewa, H., and Tham, S. H.— The effect of lysine and maize oil in growing and laying diets on the laying performance of crossbred pullets 611
Keen, B. J. *See* Kable, P. F. 575
Kelly, R. W., Newnham, J. P., Johnson, T., and Speijers, E. J.— An ultrasound technique to measure placental growth in ewes 757
Khan, T. N.— Relationship between net blotch (*Dreshslera teres*) and losses in grain yield of barley in Western Australia 671
Kirby, E. J. M., and Perry, M. W.— Leaf emergence rates of wheat in a mediterranean environment 455
Kowithayakorn, L., and Humphreys, L. R.— Effects of severity and repetition of water stress on seed production of *Macrpptilium atropurpureum* cv. Siratro 529
Kuang Yan-hua *See* McLachlan, K. D. 263

Lee, G. J., Hennessy, D. W., Nolan, J. V., and Leng, R. A.— Responses to nitrogen and maize supplements by young cattle offered a low-quality pasture hay 195
Lee, K. D. *See* Rovira, A. D. 829
Leng, R. A. *See* Lee, G. J. 195
Lenne, Jillian M. *See* Miles, J. W. 309
Levitt, M. S. *See* Mannion, P. F. 621
Lipsett, J. *See* Dear, B. S. 537
Lister, R. M. *See* Sward, R. J. 821
Littler, R. A. *See* Steele, K. W. 153

McCutcheon, S. N., Mackenzie, D. D. S., and Blair, H. T.— Nitrogen metabolism and plasma urea concentrations in fleeceweight-selected and control Romney rams 917
McDonald, B. J., and Hoey, W. A.— Effect of photo-translocation on fleece growth with cashmere goats 765
McDonald, B. J., Hoey, W. A., and Hopkins, P. S.— Cyclical fleece growth in cashmere goats 597
McFadyen, C. *See* Ellison, P. J. 895

McGrath, D. J., Gillespie, D., and Vawdrey, L.—
Inheritance of resistance to *Fusarium oxysporum* f. sp. *lycopersici* Races 2 and 3 in *Lycopersicon pennellii* 729
Mackenzie, D. D. S. *See* McCutcheon, S. N. 917
McLachlan, K. D., Elliott, D. E., De Marco, D. G., and Garran, J. H.—
Leaf acid phosphatase isozymes in the diagnosis of the phosphorus status in field-grown wheat 1
McLachlan, K. D., Kuang Yan-hua, and Muller, W. J.—
An assessment of the depletion technique for comparative measurement of phosphorus uptake in plants 263
MacLeod, D. A. *See* Hodgson, A. S. 681
McNamara, D. W. *See* Martin, R. J. 487
MacNish, G. C., and Nicholas, D. A.—
Some effects of field history on the relationship between grass production in subterranean clover pasture, grain yield and take-all (*Gaeumannomyces graminis* var. *tritici*) in a subsequent crop at Bannister, Western Australia) 1011
Mahalakshmi, V. *See* Bidinger, R. R. 37, 49
Mannion, P. F., Blaney, B. J., and Levitt, M. S.—
The nutritional value for meat chickens by feeding oat hulls and other fibrous feedstuffs 621
Marcar, N. E.—
Salt tolerance in the genus *Lolium* (ryegrass) during germination and growth 297
Marcar, N. E., and Graham, Robin, D.—
Tolerance of wheat, barley, triticale and rye to manganese deficiency during seedling growth 501
Mason, Angela J. *See* Heath, Robyn 395
Mason, W. K., Pritchard, K. E., and Small, D. R.—
Effects of early season waterlogging on maize growth and yield 27
Martin, R. J., Cullis, Brian R., and McNamara, D. W.—
Prediction of wheat yield loss due to competition by wild oats (*Avena* spp.) 487
Mead, J. A. *See* Chan, K. Y. 791
Melhuish, F. M. *See* Humphreys, E. 101, 113, 129
Miles, J. W., and Lenne, Jillian M.—
Effect of frequency of defoliation of 40 *Stylosanthes guianensis* on field reaction to anthracnose caused by *Colletotrichum gloeosporioides* 309
Moore, C. J. *See* Blaney, B. J. 993
Moore, R. M. *See* Nicholls, A. O. 329
Moran, C. *See* Oldroyd, B. P. 651
Moran, Jane R. *See* Heath, Robyn 395
Morris, D. I. *See* Guy, P. L. 139
Morthorpe, Linda *See* Turner, G. L. 15
Muirhead, W. A. *See* Humphreys, E. 101, 113, 129
Mulcahy, C. *See* Vickery, P. 1053
Muller, F. W. *See* Gramshaw, D. 355
Muller, W. J. *See* McLachlan, K. D. 263
Munro, D.—
Viruses affecting hop, *Humulus lupulus*, in Australia 83
Myers, L. F. *See* Goodchild, D. J. 559

Newnham, J. P. *See* Kelly, R. W. 757
Nicholas, D. A. *See* MacNish, G. C. 1011
Nicholas, F. W. *See* Oldroyd, B. P. 651
Nicholls, A. O., Williams, J. D., and Moore, R. M.—
Competition between *Chondrilla juncea* and *Trifolium subterraneum*: the influence of canopy areas and heights 329
Nolan, J. V. *See* Lee, G. J. 195
Norton, B. W. *See* Ash, A. J. 957, 971; Quirk, M. F. 1071

O'Brien, L., and Ronalds, J. A.—
Heritabilities of small-scale and standard measures of wheat quality for early generation selection 801
See also Archer, M. J. 465
Oldroyd, B. P., Moran, C., and Nicholas, F. W.—
Diallel crosses of honeybees. II. A note presenting an estimate of the heritability of honey production under Australian conditions 651
Omara, M. Kadry—
Selection of early maturing barley with improved response to drought stress 835

Panetta, F. D. *See* Dodd, J. 689
Pearson, C. J., and Jacobs, B. C.—
Yield components and nitrogen partitioning of maize in response to nitrogen before and after anthesis 1001
Pengelly, B. C. *See* Gramshaw, D. 355
Perry, M. W., Siddique, K. H. M., and Wallace, J. F.—
Predicting phenological development for Australian wheats 809
See also Kirby, E. J. M. 455
Polkinghorne, R. W. *See* Glatz, P. C. 445
Price, T. V. *See* Wimalajeewa, D. L. S. 735
Pritchard, K. E. *See* Mason, W. K. 27

Quirk, M. F., and Norton, B. W.—
The relationship between the cobalt nutrition of ewes and the vitamin B_{12} status of ewes and their lambs 1071

Rao, G. D. P. *See* Bidinger, F. R. 37, 49
Richards, R. A., and Townley-Smith, T. F.—
Variation in leaf area development and its effect on water use, yield and harvest index of droughted wheat 983
Rickert, R. G., Sedgley, R. H., and Stern, W. R.—
Environmental response of spring wheat in the South-western Australian cereal belt 655
Roberts, W. P. *See* Chan, K. Y. 791
Robson, A. D. *See* Scheltema, M. A. 707
Rogel, A. M., Balnave, D., Bryden, W. L., and Annison, E. F.—
Improvement of raw potato starch digestion in chickens by feeding oat hulls and other fibrous feedstuffs 629
Rogel, A. M., Annison, E. F., Bryden, W. L., and Balnave, D.—
The digestion of wheat starch in broiler chickens 639
Ronalds, J. A. *See* O'Brien, L. 801
Roughley, R. G. *See* Brockwell, J. 61; Herridge, D. F. 75
Rovira, A. D., Smettem, K. R. J., and Lee, K. E.—
Effect of rotation and conservation tillage on earthworms in a red-brown earth under wheat 829

Scheltema, M. A., Abbott, L. K., and Robson, A. D.—
Seasonal variation in the infectivity of VA mycorrhizal fungi in annual pastures in a mediterranean environment 707
Sedgley, R. H. *See* Rickert, R. G. 655
Shepherd, R. K. *See* Fordyce, G. 427; Davis, R. D. 1019
Sharma, J. R. *See* Srivastava, R. K. 1047
Siddique, K. H. M. *See* Perry, M. W. 809
Siebert, B. D. *See* Hunter, R. A. 209
Sivasithamparam, K. *See* Barbetti, M. J. 317
Small, D. R. *See* Mason, W. K. 27
Smettem, K. R. J. *See* Rovira, A. D. 829
Soeparno, and Lloyd Davies, H.—
Studies on the growth and carcass composition in Daldale wether lambs.
I. The effect of dietary energy concentration and pasture species 403
II. The effect of dietary/protein energy ratio 417
Soomro, A. W., and Waring, S. A.—
Effect of temporary flooding on cotton growth and nitrogen nutrition in soils with different nitrogen levels 91

Speijers, E. S. *See* Kelly, R. W. 757
Srivastava, R. K., and Sharma, J. R.—
Estimation of genetic variance and allied parameters through biparental mating in opium poppy (*Papaver somniferum* L.) 1047
Stapper, M.
See Jayawardane, N. S. 239
Steele, K. W., and Littler, R. A.—
Field evaluation of some factors affecting nitrogen fixation in pastures by ^{15}N isotope dilution 153
Stern, W. R. *See* Rickert, K. G. 655
Stockdale, C. R., Callaghan, Ann, and Trigg, T. E.—
Feeding high energy supplements to pasture-fed dairy cows. Effects of stage of lactation and level of supplement 927
Strickland, R. W. *See* Aylward, J. H. 177
Stür, W. W., and Humphreys, L. R.—
Seed production in *Brachiaria decumbens* and *Paspalum plicatulum* as influenced by system of residue disposal 869
Sward. R. J., and Lister, R. M.—
The incidence of barley yellow dwarf viruses in wheat in Victoria 821
See also Heath, Robyn 395

Tan, B. H., and Collins, W. J.—
Multi-allelic nature of the locus controlling leaf marking in subterranean clover 547
Tennant, D. *See* Hamblin, Ann 513
Tham, S. H. *See* Karunajeewa, H. 611
Thompson, J. P.—
Decline of vesicular-arbuscular mycorrhizae in long fallow disorder of field crops and its expression in phosphorus deficiency of sunflower 847
Thompson, R. L., and Callinan, A. P. L.—
Effects of previous and current anthelmintic treatment on productivity of Merino hogget sheep 437
Törökfalvy, E. *See* Walker, R. R. 383
Townley-Smith, T. F. *See* Richards, R. A. 983
Trigg, T. E. *See* Stockdale, C. R. 927
Turner, G. L., Gault, R. R., Morthorpe, Linda, Chase, D. L., and Bergersen, F. J.—
Differences in the natural abundance of ^{15}N in the extractable mineral nitrogen of cropped and fallowed surface soils 15
Tyler, A. L. *See* Blaney, B. J. 993

Vawdrey, L. *See* McGrath, D. J. 729

Vickery, P., Wheeler, J. L., and Mulcahy, C.—
Factors affecting the hydrogen cyanide potential of white clover (*Trifolium repens* L.) 1053
Vinijsanun, T., Cameron, D. F., and Irwin, J. A. G.—
Phenotypic variation for disease resistance and virulence within naturalized populations of *Stylosanthes humilis* and *Colletotrichum gloeosporiodes* 717

Walker, D. M., and Al-Ali, S. J.—
The endogenous phosphorus excretion of preruminant lambs 1061
Walker, R. R., Törökfalvy, E., and Behboudian, B. H.—
Uptake and distribution of chloride, sodium and potassium ions and growth of salt-treated pistachio plants 383
Wallace, J. M. *See* Perry, M. W. 809
Watson, A. *See* Kable, P. F. 565
Webster, M. E. D. *See* Hamilton, J. A. 187
Wheeler, J. L. *See* Vickery, P. 1053
White, R. J. G. *See* Humphreys, E. 101, 113, 129
Wildermuth, R. L. *See* Dodman, 473
Williams, A. J., and Winston, R. J.—
A study of the characteristics of wool follicle and fibre in Merino sheep genetically different in wool production 743
Williams, J. D. *See* Nicholls, A. O. 329
Williams, R. J. *See* Gramshaw, D. 355
Wilson, J. R., and Hacker, J. B.—
Comparative digestibility and anatomy of some sympatric C_3 and C_4 arid zone grasses 287
Wimalajeewa, D. L. S., Hallam, N. D., Hayward, A. C., and Price, T. V.—
The etiology of head rot disease of broccoli 735
Winston, R. J. *See* Williams, A. J. 743

Yeates, J. S., and Allen, D. G.—
Low effectiveness of three rock phosphates as phosphorus fertilizers on liming materials on an acid clay-loam 1033

Printed by CSIRO, Melbourne